In conclusion I would like to thank Dr. L. Davies and Mr J. Richardson of the Department of Zoology, University of Durham and Messrs A. H. Hayes and D. S. Fletcher of the British Muesum (Natural History) for their generous help in the preparation of this paper.

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West Midlands records of Hydraecia, Procus and Oporinia Species

By L. J. Evans, F.R.E.S.

Since working on records for the Midland Plateau Survey, a project of the Birmingham Natural History Society (Recorder F. A. Noble), I have been making genitalia dissections for critical identification of the local melanic forms and other species difficult to identify. Recently my interest has been further stimulated by the Lepidoptera Distribution Maps Scheme organised by the Biological Records Centre at Monks Wood. On referring to back numbers of the 'Record' for information, I came across the *Hydraecia* and *Procus* records of R. F. Bretherton (1953) and A. Richardson (1951), and as I cannot find any published records for the West Midlands, I was prompted to write these few notes.

HYDRAECIA SPECIES.

H. oculea L. Only appears sporadically at M.V. light in my garden in N.E. Birmingham, also at Sutton Park, Warwickshire, a semi-natural park which is about 2 to 3 miles further N.E. from Birmingham. Wyre Forest, one 8.viii.59.

H. crinanensis Burr. I have not found this species in the area as yet. My only specimen came with four oculea from another collection all labelled Harlech, N.W. 10.viii.52, C. Bantock.

H. paludis Tutt. Neither have I found this species in the area, but Noble (1964) records one specimen at light one mile west of the centre of Birmingham.

H. lucens Freyer. By far the commonest of the group in this area. Three or four at light in my garden which is bordered by a field of coarse grasses, is a good haul for one night. At Sutton Park, a heath and woodland area, it is only taken occasionally.

PROCUS SPECIES.

With the exception of *Procus fasciuncula* Haw, which in North Birmingham shows little variation from the usual brownish-fawn colour (reddish-fawn in Sutton Park), the other four species of the genus occuring in this part of the Midlands are mainly melanic.

P. strigilis Clerk. Occurs commonly as the melanic form and frequently as the white-banded semi-melanic form over the greater part of the West Midlands. I have only taken the normal (brown) form at Randan Wood, Worcs., and Wyre Forest, Worcs. and Shrops.

- P. latruncula Schiff. 1 have never seen in N.E. Birmingham any formother than the wholly black one which I find more commonly than strigilis. A count of the two species in my garden during two evenings in 1968 produced 18 latruncula and 6 strigilis. Earliest date recorded 31.v.57.
- P. versicolor Bork. Again I have only seen the wholly dark form. Randan Wood, Worcs., one, July 1963. Sutton Park, Warks., six, 19 and 24.vii.65.

The male of this species is very easily indentified when the genitalia are mounted on a microscope slide. The projection below the 'beak' which most authors tell us is slightly curved upwards, is not always a very good indication. The dark projection (clavus) on the inside of the valve near the base is longer and pointed in *versicolor*, and stumpy in the previous two species; also in most cases the hump on the back of the valve is shorter in *versicolor*, and usually I find the whole structure to be more deeply pigmented.

- P. literosa Haw. Although much darker than the coastal form, those found locally present no difficulty in identification. Six to eight specimens taken most evenings in season, sometimes as many as sixteen at M.V. in my garden.
- P. strigilis and latruncula I find more frequently in open country where the grass is not cut very often. Versicolor on the other hand appears to prefer fairly open woodland.

In the summer of 1965 a count was made in Sutton Park of the number of each species coming to M.V. light.

	7.vii.65	17.vii.65	19.vii.65	24.vii.65	7. viii.65
P. strigilis	0	1	3	1	0
P. latruncula	0	4	3	1	0
P. versicolor	0	0	2	4	0

From the above information it would seem that the order of appearance is somewhat similar to that noted by R. F. Bretherton, but further counts are necessary for confirmation.

OPORINIA SPECIES.

- O. dilutata Schiff. Found mainly as the melanic form all over the West Midlands. Darkest specimens recorded from Edgbaston Park (2 miles west of Central Birmingham).
- O. autumnata Bork. Occurs fairly commonly, only slightly darker than normal in the Far Forest area of Wyre Forest. Randan Wood, two 15.x.60 Sutton Park, two larvae beaten from birch 25.v.66.
- O. christyi Prout. Randan Wood, two males 15.x.60; these are much darker than several taken near Cranham in the Cotswolds, 7.x.61. May's Wood, Warks. (no date), D. W. Scott.

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